

LIST OF CLAIMS

1. (Currently Amended) A method for preparing and screening a plurality of compounds, said method performed in or on compounds ~~being handled in~~ a bulk of a stationary phase, the method comprises the sequential steps of

(a) performing a synthesis of ~~synthesizing the~~ compounds by a chemical reaction performed in the bulk of a ~~the~~ stationary phase,

(b) separating the compounds in or on the same bulk of the stationary phase using a mobile phase; and

(c) screening of the separated compounds in or on the same bulk of stationary phase,

wherein said screening involves biological or biochemical methods; wherein the stationary phase is a thin-layer chromatography plate and wherein the stationary phase is suitable for sequential synthesis.

2. (Previously Presented) A method according to claim 1, comprising additional analysis of the separated compounds in the bulk of the stationary phase or an isolated sample of the compounds.

3. (Canceled)